

REMARKS

The Examiner rejected claims 1-9. Applicant has amended claim 1 and cancelled claim 5. Claims 1-4 and 6-9 are currently pending. No new matter is presented. The above amendments and the following remarks are considered by Applicants to overcome each rejection raised by the Examiner and to place the application in condition for allowance.

Rejection pursuant to 35 U.S.C. § 103

The Examiner again rejected claims 1-9 pursuant to 35 U.S.C. § 103 as being unpatentable over Price (Re. 35,010). Applicants respectfully traverse the rejection.

Applicants respectfully submit that it would not have been obvious for one of ordinary skill to arrive at the invention of amended independent claim 1. First, Price does not disclose the following limitations of amended independent claim 1:

statistically determining an equilibration value from all the measurement values;
...
adjusting up or down the control value of any dispensing channel whose measurement value is above or below the band of tolerance for the equilibration value;

Specifically, Price does not disclose statistically determining an equilibration value from all measurement values, or adjusting the control values of dispensing channels whose measurement values fall outside the band of tolerance for the equilibration value.

The Examiner contends that Price's "FCF is equivalent to applicants' equilibrium [sic] value" because Applicants "do not specify in the claim as to what the equilibrium value is referring to." (Present Office Action at 4-5.) Applicants, however, do specify one important characteristic of the equilibration value—namely, that it is statistically determined from all the measurement values. The equilibration value can be a median value (claim 3) or a mean value

(claim 4), but it must be statistically determined from all the measurement values.

Measurements are initially taken, an equilibration value is determined, and then the dispensing channel output is adjusted to ensure that subsequent measurements correspond to the equilibration value.

By contrast, Prince's "FCF is defined as a factor by which the linearized toolspeed signal must be multiplied so that the total volume of fluid dispensed onto a workpiece 39 is substantially equal to the selected setpoint." (Column 10, lines 29-33.) Thus, Prince's FCF is not a constant gained from measurement values, but a constant that is pre-programmed and initialized at the beginning of the process. (See column 9:67-10:4.) Thus, Prince's FCF cannot disclose the equilibration value as defined by claim 5. Further, since Prince operates on a different principle, it would not have been obvious to add an equilibration value to the teachings of Prince.

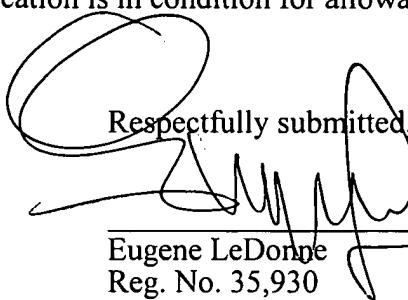
After contending that Prince's FCFs are equilibration values, the Examiner adds that "FLF's are determined from a measured curve of actual flow from the outlet of the nozzle." But FLFs (flow *linearizing* factors) are not equivalent to FCFs (flow *compensation* factors), as column 10 of Price clearly explains:

The FLF's are constants which represent factors by which toolspeed signal 128 must be multiplied in order to linearize system flow response such that when a given percentage of the full scale value of toolspeed signal 128 is applied to summing junction 113, the needle valve 27 of metering valve assembly 26 is positioned so that the same percentage of the full scale flow of fluid is discharged from nozzle outlet 31.

Further, FLFs are not equilibration values. Independent claim 5 includes the step of "adjusting up or down the control value of any dispensing channel whose measurement value is above or below the band of tolerance for the equilibration value" But if the equilibration value was the FLF, there would be no control value to adjust.

For these reasons, Applicants respectfully submit that it would not have been obvious to arrive at the invention of independent claim 1 or dependent claims 2-8. Accordingly, Applicants respectfully request withdrawal of the obviousness rejections.

Applicants believe that this application is in condition for allowance which action is respectfully submitted.

Respectfully submitted,

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